

**REMARKS**

Applicants, by the amendments presented above and the arguments presented below, have made a concerted effort to present claims which clearly define over the prior art of record, and thus to place this case in condition for allowance. Claims 1, 2, 4-13, 16-21 and 60 are currently pending. Claims 3, 14, 15 and 25-59 have been cancelled herein. Claim 60 is newly added.

***Election/Restrictions***

Applicant acknowledges the Examiner's statement that claims 25-59 are withdrawn from further consideration. Applicant has cancelled claims 25-59 herein, but explicitly reserves the right to file a divisional application directed to the subject matter of these claims at any time during the pendency of this application, or any other application which claims priority from this application.

***Drawings***

The Examiner stated that Figures 1A and 1B should be designated by a legend such as -- Prior Art -- because only that which is old is illustrated. As such, the Examiner required corrected drawings.

Applicant has provided a replacement sheet which designates that Figures 1A and 1B are -- Prior Art -- and has labeled this sheet as "Replacement Sheet" in the page header so as not to obstruct any portion of the drawing figures. Acceptance of this replacement sheet is respectfully requested.

***Claim Rejections - 35 U.S.C. §112***

The Examiner rejected claims 1 and 13 under 35 U.S.C. 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. More specifically, the Examiner has stated that claims 1 and 13 are both drawn to the subcombination of a spacer, stating that the second to the last line of both of these claims sets forth "products" as though the "products" are positively set forth in a combination. The Examiner has stated that this is improper as the products are merely set forth in the preamble with respect to the intended use of the spacer and, therefore, the Examiner required correction.

As such, Applicant has amended independent claims 1 and 13 such that the "products" are not positively set forth in a combination. Thus, Applicant respectfully requests reconsideration and allowance of independent claims 1 and 13.

***Declaration of Roger Wozniacki Under 37 CFR §1.132***

Applicant has attached hereto a Declaration of Roger Wozniacki, the sole inventor of the present invention, in support of Applicant's arguments and amendments as to the patentability of the pending claims. The Declaration will be referenced herein as: "*Wozniacki Decl. #1*".

*Claim Rejections - 35 U.S.C. §102*

Claims 1-3 and 5-8 were rejected under 35 U.S.C. 102(b) as allegedly being anticipated by United States Patent No. 2,583,443 to Perry et al. (hereinafter "Perry"). Applicant has cancelled claim 3 herein and, therefore, considers the rejection of claim 3 to be moot. With regard to the rejection of claims 1, 2 and 5-8, Applicant respectfully traverses this rejection.

Applicant has amended independent claim 1 to require that the sheets of material which form the spacer are paperboard. The Examiner states that the spacers (14, 16, 18) of Perry comprise a plurality of sheets of *paperboard* material secured together. Applicant states that this is incorrect. Perry states at column 2, lines 30-32 that "the spacers are made up of strips of corrugated paper bent in zigzag formation." Corrugated paper is not the same as paperboard. *Wozniacki Decl.* ¶ 8. Paperboard (which is used in the present invention) is basically a single sheet of paper having a predetermined thickness with varying degrees of rigidity. *Wozniacki Decl.* ¶ 10. Corrugated paper (which is used in Perry), however, generally consists of two outer sheets of flat paper glued to a fluted or "corrugated" inner sheet, thus making the "corrugated" paper inherently rigid in nature. *Wozniacki Decl.* ¶ 9. Applicant notes that Perry states at column 2, lines 23-24 that "the pallet comprises a corrugated paper board or elevated platform or deck 12". Applicant states that "corrugated paper board" is not the same as the "paperboard" claimed and as illustrated; rather, "corrugated paper board" is the same as the "corrugated" paper of which the spacers (14, 16, 18) are formed, which is necessary because Perry wanted the deck to be rigid.

Applicant further states that the difference between using "paperboard" and "corrugated" paper or "corrugated paper board" is not insubstantial. Applicant has utilized computer program modeling to illustrate the difference between forming the spacer of the

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invention in the wave-like pattern with "paperboard", as claimed, compared to forming the spacer of the invention in the wave-like pattern with "corrugated" paper, as generally described in Perry, where each spacer has generally identical lengths, widths and heights. *Wozniacki Decl.* ¶¶ 11 and 12. According to our actual test results, a laminated "paperboard" spacer having a uniform thickness of approximately one-quarter (0.25) of an inch should have a compression strength of approximately 27,000 pounds, with each spacer weighing approximately 0.962 pounds. *Wozniacki Decl.* ¶ 13. According to the computer program, to form a laminated "corrugated" paper spacer having approximately the same compression strength, e.g., 27,000 pounds, the laminated "corrugated" paper spacer would have to have a uniform thickness of approximately one and four-tenths (1.80) inches, and each such spacer would weigh approximately 1.818 pounds. *Wozniacki Decl.* ¶ 14. Thus, a "corrugated" paper spacer, as generally described in Perry, in order to support the same dead weight as the "paperboard" spacer of the invention, would have to weigh approximately two (2) times as much as the "paperboard" spacer of the invention and would have to have a thickness of approximately eight (8) times as much as the "paperboard" spacer of the invention.

Because of the foregoing, the "corrugated" paper spacer cannot and does not provide the same benefits as does the "paperboard" spacer. As discussed in the "Background Of The Invention" of the application, there would thus be an enormous cost savings both in the manufacture of the "paperboard" spacers compared to the "corrugated" paper spacers, and in the freight cost of using the "paperboard" spacers compared to the "corrugated" paper spacers. *Wozniacki Decl.* ¶ 15. By using the "paperboard" spacers, the material costs associated therewith would be approximately one-half of the material costs associated with using the "corrugated" paper spacers because the pounds of material used to make a predetermined number of "paperboard" spacers would be approximately one-half of the

pounds of material used to make the predetermined number of "corrugated" paper spacers. Also, using the "paperboard" spacers as opposed to the "corrugated" paper spacers would create a cost savings in freight costs for two reasons. First, when the spacers are utilized in a shipment of wallboard, for instance, because the "paperboard" spacers are lighter than the "corrugated" paper spacers, more wallboard could be included in the shipment than if the "corrugated" paper spacers were used. This is because most freight shipments are typically limited to the amount of weight shipped, such that it would be desirable to have as much of the weight shipped attributed to the wallboard than to the spacers. Second, if the spacers were to be the only item shipped, for instance to be returned to a plant after shipment of the wallboard, the shipment could return many more "paperboard" spacers as opposed to "corrugated" paper spacers because of both the lighter weight of the "paperboard" spacers and the smaller thickness of the "paperboard" spacers compared to the "corrugated" paper spacers. These cost savings could run into the millions of dollars. *Wozniacki Decl.* ¶ 15.

Applicant has further amended independent claim 1 to require that the edges of the spacer be configured to directly support the products. The spacers (14, 16, 18) of Perry are not designed to directly support the products. Rather, according to Perry, the spacers (14, 16, 18) are preferably to be secured between a deck (12) and a base board (20) by cementing the spacers (14, 16, 18) into position. Perry notes at column 3, lines 45-52 that the base board (20) is not essential, but nowhere states or suggests that the deck (12) is not essential. In fact, each of the independent claims of Perry require the deck (12), further emphasizing that Perry considered the deck (12) to be an essential part of the invention, i.e., that the spacers (14, 16, 18) would not work on their own to support products. Because the deck (12) is essential according to Perry, the spacers (14, 16, 18) are not configured to *directly* support the products.

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In view of the amendments made to independent claim 1, and in view of the arguments presented hereinabove, Applicant states that independent claim 1 is not anticipated by Perry such that independent claim 1 is in condition for allowance. As Applicant states that independent claim 1 is in condition for allowance, Applicant respectfully requests reconsideration and allowance of dependent claims 2 and 5-8.

*Claim Rejections – 35 U.S.C. §103*

Claims 4 and 9-12 were rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over United States Patent No. 2,583,443 to Perry in view of the Examiner's Official Notice.

As Applicant states that independent claim 1 is in condition for allowance in view of Perry, Applicant respectfully requests reconsideration and allowance of claims 4 and 9-12, each of which is ultimately dependent upon independent claim 1. Applicant notes that with the cancellation of dependent claim 3, Applicant has amended dependent claim 4 to be dependent upon independent claim 1 rather than on dependent claim 3. Applicant notes that claims 10 and 12 have been amended, and that such amendments are supported by the original disclosure and are not made in view of prior art.

Further, with regard to dependent claims 9, 10 and 12, the Examiner states that "it is within the purview of one of ordinary skill in the art to optimize the dimensions, strength characteristics and weight of the spacers so that the spacers are suitable for the loads that will be supported by them. Accordingly one of ordinary skill in the art would know to manufacture the spacers in accordance with the specific environment within which it would be used." Applicant traverses this statement.

For instance, in claim 9, Applicant requires that the thickness of the spacer be

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approximately one-quarter of an inch. Perry, however, states at column 4, lines 67-72 that "[i]n substantially all cases, the thickness of the zigzag spacer may run from say 1½" to 2". For very light loads the thickness may be reduced to say 1", but in general a thin spacer is not desirable because the pallet may lack stability when excessively thin spacers are employed." Thus, Perry definitively states that spacers having a thickness of less than 1" are not desirable because the pallet may lack stability, and this is with the requirement that a deck (12) be secured to the spacers. Thus, a spacer which is approximately 4 times smaller than a spacer having a 1" thickness would, according to Perry, be too thin. Thus, Perry definitively teaches away from having a spacer that is less than 1" thick, such that Applicant states it would not have been "within the purview of one of ordinary skill in the art to optimize the dimensions ... of the spacers".

Further, for instance in amended claim 10, Applicant requires that the spacers be configured to support a dead weight of at least approximately fifteen thousand pounds. As stated above, Perry states that the spacer should generally be of a thickness between 1½" to 2", but may be reduced to 1" for lighter loads. Thus, were Perry to use its teachings to make a spacer of ¼" (which is less than it already teaches), the spacer would not be able to support much dead weight at all, and especially not something on the order of at least approximately fifteen thousand pounds.

Applicant further reiterates the foregoing in view of the discussion provided hereinabove regarding Applicant's computer program modeling which compares "paperboard" spacers, of the type claimed herein, to "corrugated" paper spacers of the type disclosed and taught in Perry. Also, as Perry states that the spacers thereof having a thickness of less than 1" are undesirable, a computer program modeling of a "corrugated" paper spacer was performed where the spacer has a thickness of approximately one inch. *Wozniacki Decl.*

¶ 16. This spacer, while having a weight which is generally equivalent to that of a "paperboard" spacer having a thickness of one-quarter (0.25) of an inch, would only be able to have a compression strength of approximately 11,000 pounds. *Wozniacki Decl.* ¶ 16. Thus, in order to increase the compressive strength of the "corrugated" paper spacer of Perry, the thickness of the spacer would have to be increased, which as explained hereinabove and in the "Background of the Invention" of the application is highly undesirable. As such, Applicant states that it would not have been obvious to one of ordinary skill in the art to optimize the dimensions, strength characteristics and weight of the spacers described in Perry.

Applicant further states that the formation of the "corrugated" paper spacers of Perry would be very impractical as the folding and laminating of the Perry spacer into the zigzag pattern in a number of layers to provide the spacer with a thickness of between 1" and 2", would require an enormous machine to apply the adhesive, and to fold and hold the zigzag pattern until "set". *Wozniacki Decl.* ¶ 17. Applying enough pressure to create the "bond" would require about 20 seconds. *Wozniacki Decl.* ¶ 17. Applying too much pressure would collapse the flute arches of the "corrugated" paper spacers and would severely weaken the structure under compression. *Wozniacki Decl.* ¶ 17.

Claims 13-24 were rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over United States Patent No. 2,583,443 to Perry et al. in view of United States Patent No. 3,982,057 to Briggs et al. (hereinafter "Briggs"), and further in view of the Examiner's Official Notice.

Applicant initially notes that claims 14 and 15 have been cancelled herein and, therefore, Applicant considers the rejection of these claims to be moot. In view of the cancellation of claims 14 and 15, claims 16-18 have each been amended to be dependent



upon independent claim 13.

Applicant has also amended independent claim 13 to require that both the first and second spacer segments have a plurality of sheets of paperboard which have been laminated on top of one another and secured to one another with an adhering means, and that the first and second spacer segments define first and second outer surfaces and first and second edge surfaces which are provided between the first and second outer surfaces, and that the first and second edges of the first and second spacer segments be configured to directly support the products.

Applicant respectfully traverses this rejection on the same basis as described herein with regard to the Examiner's rejection of claims 1-3 and 5-8 as being anticipated by Perry. Applicant states that as Perry does not teach forming either the first or second spacer segments of independent claim 13, it does not matter what Briggs allegedly teaches regarding adhering wave-like spacer segments construction from Kraft paper. Thus, in view of the foregoing, Applicant respectfully requests reconsideration and allowance of claims 13-24

Claims 1-8 and 11 were rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over United States Patent No. 5,722,626 to Menchetti et al. (hereinafter "Menchetti") in view of United States Patent No. 4,391,202 to Carter et al. (hereinafter "Carter"). Applicant has cancelled claim 3 herein and, therefore, considers the rejection of claim 3 to be moot. With regard to the rejection of claims 1, 2, 4-8 and 11, Applicant respectfully traverses this rejection.

The Examiner states that it would have been obvious to one of ordinary skill in the art to modify the spacers of Menchetti with the teachings of Carter so as to produce a high strength spacer capable of the intended uses set forth in the claims. Applicant disagrees with

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this statement.

By way of background, management of makers of wallboard, companies such as National Gypsum Company (the assignee of Menchetti), and retailers who sell the wall board, companies such as The Home Depot, have been looking for a replacement to using pieces of wallboard as risers or spacers to support stacks of wallboard for at least the past fifty years. *Wozniacki Decl. ¶ 18.* Management of makers of wallboard want to replace using pieces of wallboard as risers or spacers for at least the following two reasons: (1) using pieces of wallboard requires wasting good pieces of wallboard that could otherwise be sold; and (2) the manufacture of these risers or spacers causes them to spend time and money in preparing these risers or spacers, e.g., by stacking, laminating and cutting a plurality of sheets of wallboard. *Wozniacki Decl. ¶ 18.* Retailers who sell the wallboard also want to replace using pieces of wallboard as risers or spacers for at least two reasons, namely: (1) the wallboard risers or spacers create a lot of dust which the retailer needs to clean-up; and (2) the wallboard risers or spacers are then a waste product and the retailer needs to pay to have the wallboard risers or spacers disposed as they are a waste product. *Wozniacki Decl. ¶ 18.*

In view thereof, National Gypsum Company, along with others, began experimenting with making spacers out of other materials, but with the requirement that the spacers be preferably inexpensive to make, be disposable and/or returnable and/or recyclable, and be configured to have the required compressive strength. *Wozniacki Decl. ¶ 19.* As evidenced by the patent to Menchetti, National Gypsum Company even came up with its own design to try and solve its problems, but it is believed that National Gypsum Company does not manufacture or utilize its own invention because Applicant has never seen evidence that such a product is in use in the industry. *Wozniacki Decl. ¶ 20.* Applicant was also unaware that National Gypsum Company owned a patent (Menchetti) for such a product. *Wozniacki Decl.*

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¶ 21. Presumably, the reason for why National Gypsum Company does not apparently manufacture or utilize its own invention is because National Gypsum Company's product would be very difficult and expensive to manufacture. *Wozniacki Decl.* ¶ 22.

In fact, in 1993, Applicant, being aware of the problems associated with using wallboard to form spacers or risers, began experimenting with different structures and materials to provide a product to National Gypsum Company which would meet each of its requirements and solve as many of the aforementioned problems as possible. *Wozniacki Decl.* ¶ 23. In October 1994, Applicant sold 15,000 such products to National Gypsum Company at a cost of \$1.25 per product. *Wozniacki Decl.* ¶ 24. The products were formed of strips of corrugated paper laminated together into a block-like form. *Wozniacki Decl.* ¶ 24. The block-like products were positioned under stacks of wallboard in a similar manner as were the spacers illustrated in Figures 1A and 1B of the present application, and in a similar manner as the spacers of the present invention as illustrated in Figures 20 and 21 of the present application. *Wozniacki Decl.* ¶ 24. Sometime thereafter, but prior to June 28, 1995, Applicant met with Mr. Daniel A. Winkowski, who is one of the named inventors of the Mechetti reference (assigned to National Gypsum Company), to discuss the products sold to National Gypsum Company and their performance, specifically with regard to their performance when they become wet. *Wozniacki Decl.* ¶ 25. After Applicant's meeting with Mr. Winkowski, Applicant looked into reconfiguring the block-like spacers formed of corrugated paper such that they would meet National Gypsum Company's performance criteria in both wet and dry environments. *Wozniacki Decl.* ¶ 26. Applicant's solution was to saturate the block-like spacers with wax as these reconfigured spacers achieved excellent results during testing. *Wozniacki Decl.* ¶ 26. On June 28, 1995, Applicant sent Mr. Winkowski a letter advising him of the improved block-like spacers, but never received any

further contact from him, presumably because the addition of the wax to the cost of the spacers would add approximately 30% to the cost of each spacer. *Wozniacki Decl.* ¶ 16.

To this day, Applicant does not believe that anyone, including National Gypsum Company, has been able to manufacture and/or sell a spacer which overcomes these problems. *Wozniacki Decl.* ¶¶ 27 and 28. The spacer of the present invention, however, does overcome these problems. *Wozniacki Decl.* ¶¶ 27 and 28.

Thus, as explained, Applicant, by the present invention, is trying to solve a problem which has existed for many years in order to solve the problem faced by companies such as National Gypsum Company. Menchetti (which is assigned to National Gypsum Company) was trying to solve this exact same problem as evidenced by the discussion of the Background of the Invention of Menchetti. As explained by the Examiner, Carter discloses how spacers can be formed from multiple (5-15) layers of paperboard adhered together with the grain pattern being chosen with respect to the loads that will be carried. As Carter issued in 1983, fifteen years before the issuance of Menchetti, the Carter reference was available for teaching to Menchetti and others at National Gypsum Company, or elsewhere, who were trying to solve this problem. Yet, when Menchetti and others at National Gypsum Company came up with their attempted solution to this problem, the workers for National Gypsum Company (who Applicant considers to be ones of ordinary skill in the art) did not disclose or even suggest the use of multiple layers of paperboard adhered together with the grain pattern being chosen with respect to the loads that will be carried, which is taught by Carter. Thus, these persons of ordinary skill in the art did not consider it an obvious combination as stated by the Examiner or they would have combined the two.

As explained hereinabove, the product of Menchetti is not believed to be manufactured or utilized by companies such as National Gypsum Company. *Wozniacki Decl.* ¶ 20. It is known to Applicant that manufacturers of wallboard, like National Gypsum Company, and retailers who sell wallboard, like The Home Depot, are still searching for an acceptable replacement to using pieces of wallboard as risers or spacers to support stacks of wallboard. *Wozniacki Decl.* ¶ 18. As this was an extremely important problem for companies like National Gypsum Company to solve, the companies like National Gypsum Company should have solved this problem by utilizing "paperboard" as taught in Carter. But these companies did not utilize "paperboard". They are still searching for the answer. Applicant's invention is the answer and is not of a make that it would be just obvious to one of ordinary skill in the art to combine the teachings of Carter with Menchetti. As stated, Applicant was unaware of Menchetti until same was discussed in this Office Action. *Wozniacki Decl.* ¶ 21.

In view of the foregoing, Applicant respectfully requests reconsideration and allowance of claims 1-8 and 11.

Claims 9, 10 and 12 were rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over United States Patent No. 5,722,626 to Menchetti in view of United States Patent No. 4,391,202 to Carter, and further in view of the Examiner's Official Notice. As claims 9, 10 and 12 are all dependent upon independent claim 1, and because Applicant states that independent claim 1 is in condition for allowance, Applicant respectfully requests reconsideration and allowance of claims 9, 10 and 12.

As Applicant states that independent claim 1 is in condition for allowance in view of a combination of Menchetti and Carter, Applicant respectfully requests reconsideration and allowance of claims 9-12, each of which is ultimately dependent upon independent claim 1. Applicant notes that claims 10 and 12 have been amended, and that such amendments are supported by the original disclosure and are not made in view of prior art.

Claims 13-24 were rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over United States Patent No. 5,722,626 to Menchetti in view of United States Patent No. 4,391,202 to Carter, in view of the Examiner's Official Notice, and further in view of United States Patent No. 3,982,057 to Briggs.

Applicant initially notes that claims 14 and 15 have been cancelled herein and, therefore, Applicant considers the rejection of these claims to be moot. In view of the cancellation of claims 14 and 15, claims 16-18 have each been amended to be dependent upon independent claim 13.

Applicant has also amended independent claim 13 to require that both the first and second spacer segments have a plurality of sheets of paperboard which have been laminated on top of one another and secured to one another with an adhering means, and that the first and second spacer segments define first and second outer surfaces and first and second edge surfaces which are provided between the first and second outer surfaces, and that the first and second edges of the first and second spacer segments be configured to directly support the products.

Applicant respectfully traverses this rejection on the same basis as described herein with regard to the Examiner's rejection of claims 1-8 and 11 as being unpatentable over Menchetti in view of Carter and Examiner Official Notice. Applicant states that as it would

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not have been obvious to form either the first or second spacer segments of independent claim 13 by combining the teachings of Menchetti, Carter and Examiner Official Notice, it does not matter what Briggs allegedly teaches regarding adhering wave-like spacer segments construction from Kraft paper. Thus, in view of the foregoing, Applicant respectfully requests reconsideration and allowance of claims 13-24

***Newly Added Claim***

In view of Applicant's arguments made in view of the rejections based on Perry, Applicant has added new claim 60, which is dependent upon independent claim 1, which requires that the spacer have a thickness of approximately one-quarter (0.25) of an inch, and which is further required to be configured to support a dead weight of at least approximately fifteen thousand pounds. Perry definitely does not disclose or suggest such a structure. Further, Perry states that if the thickness of the spacer were to be decreased, the amount of the load which it could support would also be decreased. As such, Applicant respectfully requests consideration and allowance of new claim 60 in view of the foregoing, and further in view of new claim 60 being dependent upon independent claim 1 which Applicant states is in condition for allowance.

In view of the above Amendments and Remarks, Applicants respectfully submit that the claims of the application are allowable over the rejections of the Examiner. Should the Examiner have any questions regarding this Amendment, the Examiner is invited to contact one of the undersigned attorneys at (312) 704-1890.

Respectfully submitted,

Date: December 12, 2005

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